5.7 Visual Quality

When individuals view the environment during an everyday commute or on a first-time trip to the area, the visual characteristics strongly influence responses—positive and negative. Research has shown that most people will generally agree on which views have high or low visual quality. This chapter describes how WSDOT studied the visual quality of the Renton to Bellevue project area and examined how construction and operations will affect the views found within these local communities.

How did we identify and evaluate visual resources for the Renton to Bellevue Project?

WSDOT conducted a visual impact assessment that evaluated both negative and positive visual effects of the project on the area's visual resources. These resources were identified based on a field reconnaissance of the I-405 Corridor, review of existing aerial photographs, and review of proposed design plans. Our evaluation used a subjective assessment of three criteria—vividness, intactness, and unity—which are "artistic" elements that are prominent in landscapes perceived as having high visual quality. During our evaluation, we incorporated proposed project improvements into the views looking toward and from I-405 to determine visual quality after project construction. Our analysis evaluated changes in visual resources as a result of the project and the likely viewer response to those changes.

What views can we see within the project area?

The I-405 Corridor is located in a primarily urban/suburban landscape with some hillside segments of natural vegetation providing isolated forest landscape elements. From surrounding neighborhood roadways, views of the existing I-405 freeway are limited because of screening provided by topography and the existing land cover (such as vegetation and manmade structures). From the Cedar River bridge north to NE Park Drive, there is good visibility toward and away from I-405 with views of large industrial developments to the west and residential neighborhoods to the east (see Exhibit



View looking west toward I-405 near I-90

Please refer to the Renton to Bellevue Project Visual Quality Discipline Report in Appendix R (on CD) for a complete discussion of the visual quality analysis.

How is visual quality determined?

The project team determined the visual quality of existing views using three criteria.

- Vividness is the memorability of landscape components as they combine in striking and distinctive visual patterns.
- Intactness is the visual integrity of the natural and human landscape and its freedom from encroaching elements.
- Unity is the visual coherence and compositional harmony of the landscape considered as a whole (FHWA, 1981).

Exhibit 5.7-1: Areas visible from I-405



5.7-1). Looking north of NE Park Drive, some houses and residential neighborhoods can be seen east of I-405, although the steep hillsides and vegetation limit visibility. Occasional views of Lake Washington can be seen to the west. While traveling southbound, highway users can see homes and other buildings along the lakeshore. There is greater visibility from and toward I-405 at the interchanges and at the northern end of the project area as I-405 approaches I-90. Some of these interchanges have views of strip shopping areas and other commercial or multi-family residential developments. The Factoria Mall and adjacent development, for example, are easily visible from I-405 at the northern end of the project area.

How will the project affect what people see?

Taken as a whole, the Renton to Bellevue Project will result in minor changes in the visual quality experienced by I-405 users and neighbors. Views from each perspective are discussed below. Exhibit 5.7-2 illustrates the before and after visuals of key project improvements. Project features depicted include the SR 169 flyover ramp, the N 8th Street direct access ramps, the Coal Creek Parkway overpass, and the Coal Creek Parkway to I-90 area braids.

I-405 users

Freeway users will experience increased complexity in what they see and a decrease in visual quality. The effects on visual quality will include increases in manmade development and encroachment – such as more pavement, more traffic lanes, more signs, more vertical walls and other transportation-related structures — thereby decreasing the visual integrity or intactness of the landscape. Further, much of the existing roadside vegetation, including many medium to mature trees, will be cleared for construction. The application of Context Sensitive Solutions (CSS), (please see the discussion on CSS later in this chapter), in the design and construction of the transportation-related structures will reduce the effects on visual integrity. The clearing of existing vegetation will be partially offset by landscaping added at project completion. Overall, the visual effect on highway users will be moderate to low.

I-405 neighbors

Many neighbors west of I-405 look uphill toward the freeway. Once project improvements are complete, these neighbors will see more of I-405, primarily raised structures such as retaining

walls, noise walls, and access ramps. Most neighbors east of I-405 are situated on plateaus and hillsides above the freeway and will experience little change in what they see from their neighborhoods. Neighbors close to any of the eight interchanges that will be reconfigured will experience some changes in visual quality. However, these changes will not be substantial within the existing landscape of primarily commercial and light industrial uses. There will be a moderate visual impact for users of Cedar River Park from the SR 169 flyover ramp. Overall, the effects on visual resources will be low.

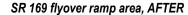
What measures are proposed to avoid or minimize effects to visual quality during construction?

The Renton to Bellevue Project is being planned, developed, and designed in accordance with CSS guidelines. These guidelines provide an approach that incorporates community values and improves compatibility of the transportation facility with the communities and neighborhoods through which it passes. CSS also meets local, regional, and national requirements for the safe, efficient, and effective movement of people and goods. CSS considers the elements of mobility, safety, environment, and attractiveness throughout the project. Adhering to these guidelines, the Renton to Bellevue Project is being developed to fit its physical surroundings and to preserve scenic, visual, historic, and environmental resources.

The application of CSS guidelines precludes the need for further mitigating visual impacts. Because the project is being developed with local input, community concerns relating to appearance, environment, cultural resources, and other areas are being addressed early. Mitigation measures typical for transportation projects, such as retaining existing natural vegetation and planting new vegetation to screen manmade elements, are incorporated within the highway and related transportation features. Other areas subject to CSS include structural elements, landscape features, lighting, signage, and special elements such as parking structures and pedestrian bridges.

Exhibit 5.7-2: Selected views, before and after project construction

SR 169 flyover ramp area, BEFORE







Coal Creek Parkway overpass, BEFORE



Coal Creek Parkway overpass, AFTER



Coal Creek Parkway to I-90 area, BEFORE



Coal Creek Parkway to I-90 area, AFTER

